

## AMENDMENTS TO THE CLAIMS

Claim 1. (currently amended) A radio transmission method for a radio network having a plurality of communication stations, comprising the steps of:

selecting one of said plurality of communication stations as a control station to control transmission between the communication stations in the radio network; and  
said control station defining a transmission frame format having a defined frame period and consisting of a management information transmission region and an information transmission region; wherein said management information transmission region consists of a fixed length down-link management section and a station synchronous section; said station synchronous section for identifying each communication station in the radio network and having a variable length corresponding to the number of communication stations in the radio network; and  
said control station sending the management information transmission region to said plurality of communication stations for use by said radio network to communicate using the defined transmission frame format;  
wherein said information transmission region consists of a first information transmission region for transmitting information isochronously and a second information transmission region for transmitting other information asynchronously.

Claim 2. (canceled)

Claim 3. (currently amended) The radio transmission method according to claim 21, wherein said first information transmission region has a fixed length and precedes said second information transmission region in said information transmission region.

Claim 4. (original) The radio transmission method according to claim 3, wherein said first information transmission region follows said down-link management transmission region and said second information transmission region precedes said station synchronous transmission section.

Claim 5. (currently amended) The radio transmission method according to claim 21, wherein said first information transmission region has a fixed length and follows said second information transmission region in said information transmission region.

Claim 6. (currently amended) The radio transmission method according to claim 21, wherein the length of said second information transmission region is set to a minimum length that is limited by the number of communication stations in the radio network.

Claim 7. (original) The radio transmission method according to claim 6, wherein said first information transmission region follows said second information transmission region in said information transmission region.

Claim 8. (original) The radio transmission method according to claim 1,

wherein information identifying a new communication station in the radio network is added to the station synchronous section.

Claim 9. (currently amended) A radio transmission method for a control station of a radio network having a plurality of communication stations, comprising the steps of:

defining a transmission frame format having a defined frame period and consisting of a management information transmission region and an information transmission region; and

setting a station synchronous section in the management information transmission region for identifying each communication station in the radio network, wherein the station synchronous section has a variable length corresponding to the number of communication stations in the radio network; and

sending the management information transmission region to said plurality of communication stations for use by said radio network to communicate using the defined transmission frame format;

wherein said information transmission region consists of a first information transmission region for transmitting information isochronously and a second information transmission region for transmitting other information asynchronously.

Claim 10. (canceled)

Claim 11. (currently amended) The radio transmission method according to claim ~~109~~, wherein said first information transmission region has a fixed length and precedes

said second information transmission region in said information transmission region.

Claim 12. (original) The radio transmission method according to claim 11, wherein said first information transmission region follows said down-link management transmission region and said second information transmission region precedes said station synchronous transmission section.

Claim 13. (currently amended) The radio transmission method according to claim ~~109~~, wherein said first information transmission region has a fixed length and follows said second information transmission region in said information transmission region.

Claim 14. (currently amended) The radio transmission method according to claim ~~109~~, wherein the length of said second information transmission region is set to a minimum length that is limited by the number of communication stations in the radio network.

Claim 15. (original) The radio transmission method according to claim 14, wherein said first information transmission region follows said second information transmission region in said information transmission region.

Claim 16. (original) The radio transmission method according to claim 9, wherein information identifying a new communication station in the radio network is added to the station synchronous section.

Claim 17. (currently amended) A control station for controlling a radio network having a plurality of communication stations, comprising:

a controller for defining a transmission frame format having a defined frame period and consisting of a management information transmission region and an information transmission region; wherein said management information transmission region consists of a fixed length down-link management section and a station synchronous section; said station synchronous section for identifying each communication station in the radio network and having a variable length corresponding to the number of communication stations in the radio network; and

a radio transmitter for sending and receiving signals having the defined transmission frame format; the radio transmitter sending the management information transmission region to said plurality of communication stations for use by said radio network to communicate using the defined transmission frame format;

wherein said information transmission region consists of a first information transmission region for transmitting information isochronously and a second information transmission region for transmitting other information asynchronously.

Claim 18. (canceled)

Claim 19. (currently amended) The control station according to claim 1817, wherein said first information transmission region has a fixed length and precedes said second information transmission region in said information transmission region.

Claim 20. (original) The control station according to claim 19, wherein said first information transmission region follows said down-link management transmission region and said second information transmission region precedes said station synchronous transmission section.

Claim 21. (currently amended) The control station according to claim 1817, wherein said first information transmission region has a fixed length and follows said second information transmission region in said information transmission region.

Claim 22. (currently amended) The control station according to claim 1817, wherein the length of said second information transmission region is set to a minimum length that is limited by the number of communication stations in the radio network.

Claim 23. (original) The control station according to claim 22, wherein said first information transmission region follows said second information transmission region in said information transmission region.

Claim 24. (original) The control station according to claim 17, wherein information identifying a new communication station in the radio network is added to the station synchronous section.

Claim 25. (currently amended) A radio transmission network for radio

transmission between a control station and a plurality of communication stations, comprising:

    said control station for controlling said radio transmission network, comprising:

        a first controller for defining a transmission frame format having a defined frame period and consisting of a management information transmission region and an information transmission region; wherein said management information transmission region consists of a fixed length down-link management section and a station synchronous section; said station synchronous section for identifying each communication station in the radio network and having a variable length corresponding to the number of communication stations in the radio network; wherein said information transmission region consists of a first information transmission region for transmitting information isochronously and a second information transmission region for transmitting other information asynchronously; and

        a first radio transmitter for sending and receiving signals having the defined transmission frame format; the first radio transmitter sending the management information transmission region to said plurality of communication stations for use by said radio network to communicate using the defined transmission frame format; and

at least one communication station controlled by said control station, comprising:

    a second radio transmitter for sending and receiving signals having the defined transmission frame format; and

    a second controller for transmitting a station synchronous signal identifying the communication station and included at a designated position in

said station synchronous section.

Claim 26. (canceled)

Claim 27. (currently amended) The radio transmission network according to claim 2625, wherein said first information transmission region has a fixed length and precedes said second information transmission region in said information transmission region.

Claim 28. (original) The radio transmission network according to claim 27, wherein said first information transmission region follows said down-link management transmission region and said second information transmission region precedes said station synchronous transmission section.

Claim 29. (currently amended) The radio transmission network according to claim 2625, wherein said first information transmission region has a fixed length and follows said second information transmission region in said information transmission region.

Claim 30. (currently amended) The radio transmission network according to claim 2625, wherein the length of said second information transmission region is set to a minimum length that is limited by the number of communication stations in the radio network.

Claim 31. (original) The radio transmission network according to claim 30, wherein said first information transmission region follows said second information transmission region in said information transmission region.

Claim 32. (original) The radio transmission network according to claim 25, wherein information identifying a new communication station in the radio network is added to the station synchronous section.